

Transportation Master Plan & Water and Wastewater Master Plan Update

**Town of East Gwillimbury** 

### WELCOME

to Public Information Centre 1





Transportation Master Plan & Water and Wastewater Master Plan Update

**Town of East Gwillimbury** 

### **Station 1**

Sign-in, Welcome, and Context





#### Transportation Master Plan Water and Wastewater Master Plan Update

#### What is a Transportation Master Plan?

A Transportation Master Plan (TMP) identifies the longterm transportation objectives of a defined area and specific solutions requiring further study. Transportation is an essential part of a community and is one of the primary factors driving the Town's environmental, economic, and social sustainability. A transportation system can influence the travel choices that people make and these choices will have a significant effect on the sustainability of the area and its growth.

#### What is a Water and Wastewater Master Plan?

A Water and Wastewater Master Plan (W/WWMP) provides a 'roadmap' of water and wastewater infrastructure requirements based on existing and future capacity deficiencies identified, as well as associated cost details and recommended implementation timing. The W/WWMP will ensure accommodation of the expected population of developments to increase to the year 2041. The purpose of the Master Plan is to provide input into required infrastructure projects and budget decisions based on five year incremental growth scenarios.

Transportation Master Plan			
<b>Builds on:</b>	Seeks public input:		
Provincial Growth Plan	Follows Phase 1 and 2		
York Region Plans	of the Municipal Class		
Town's Official Plan	EA Process		
Guides decisions on	<b>Planning for:</b>		
community transportat	Drivers		
planning	Pedestrians		
A long term strategic		Transit Users	
Town-wide Plan		Developers	

Water and Wastewater Master Plan			
<b>Builds on:</b> Provincial Growth Plan York Region Plans Town's Official Plan	Seeks public input: Follows Phase 1 and 2 of the Municipal Class EA Process		
Guides decisions on future water and wastewater infrastructure		Planning for: Residents	
A long term strategic Town-wide Plan		Developers	



#### Transportation Master Plan Water and Wastewater Master Plan Update

#### **Regional Context**

The Town of East Gwillimbury is located in northern York Region and borders Simcoe County, Durham Region, and Lake Simcoe.



#### Constraints

The Town has several environmental constraints due to the Greenbelt Natural Heritage System (NHS) and the Oak Ridges Moraine (ORM). Outside of the existing Secondary Plan areas, new development requires special permits.





#### Transportation Master Plan Water and Wastewater Master Plan Update

#### **Planned Growth**



The Town's population and employment is expected to grow significantly. Growth is centered around Green Lane West, Sharon, Holland Landing, Mount Albert, and Queensville<sup>1</sup>.

#### **Planning Context**

The Town's TMP and W/WWMP will be developed within the context of existing policies and initiatives at the provincial, regional, and local levels.

#### Provincial

- Provincial Policy Statement, 2014
- Growth Plan for the Greater Golden Horseshoe, 2017 Update
- Regional Transportation Plan, 2017 Update
- GO Regional Express Rail (RER), 2016
- GO Station Access Plans, 2016
- Highway 400 Highway 404 Extension Link
- Transit Supportive Guidelines
- #CycleON: Ontario's Cycling Strategy

#### Regional

- York Region Water and Wastewater Master Plan, 2016
- York Region Transportation Master Plan, 2016
- New Communities Guidelines, 2013
- Transportation Mobility Plan Guidelines for Development Applications, 2016
- Access Guidelines for Regional Roads, 2007

#### • Official Plan, 2010

- Strategic Plan, 2015 2018
- Water and Wastewater Master Plan, 2009
- Transportation Master Plan, 2010
- Active Transportation and Trails Master Plan, 2012
- Green Lane Secondary Plan, on-going
- Roads Needs Assessment Study, 2009
  - Notes:

<sup>1</sup>The urban boundary is subject to change. York Region is currently undertaking the Municipal Comprehensive Review (MCR) to determine where growth will occur. <sup>2</sup>York Region 45% Intensification Scenario, 2016 - Subject to Change





Transportation Master Plan

#### **Town of East Gwillimbury**



#### **Transportation Master Plan - Problem & Opportunity**



#### **Transportation Master Plan**

#### What is this study about?

#### Purpose



Support **all modes of travel** (auto, transit, on road and off road active transportation)



Identify gaps and opportunities in the transportation network



Accommodate growth to 2041 and beyond



Support existing and future land uses



Develop a well-integrated, multi-modal, and sustainable transportation network

#### This Transportation Master Plan (TMP) will:



**Update** the Town's 2010 TMP and inform the 2012 Active Transportation and Trails Master Plan



Serve as a blueprint for the Town to develop its future transportation network



Focus on active transportation, connectivity, and accessibility



Promote community prosperity and sustainability



Support the Town's vision for a safe, accessible, and livable community

#### Following Phase 1 and 2 of the EA Process



#### **Transportation Master Plan**

#### East Gwillimbury Today Travel Patterns (6 -9 AM)



#### **Internal Travel Demand (Daily)**



#### **Transportation Master Plan**

#### **Existing Conditions Daily Traffic Volumes**



#### **Transit Demand**

	2014 Bo	ardings	2015 Boardings		
	Avg Weekday	Avg Saturday	Avg Weekday	Avg Saturday	
Route 52 Holland Landing	262	108	↘ <b>196</b>	ک <mark>َ 99</mark>	
Route 58 Mount Albert	130	9	∖հ 128	<b>≥</b> 5	
	Transit trips are trending downw			nwards.	

#### **Active Transportation Level of Service**

Pedestrian Level of Service (PLOS)

Based on user comfort, safety, and convenience and are thus subjective.

Higher segment scores are found at locations where vehicle speeds and volumes are lower, and where there are wider sidewalks.

#### Bicycling Level of Service (BLOS)

Based on user comfort, safety, and convenience and are thus subjective.

It is most sensitive to facility type. Physically separated bikeways such as cycle tracks, protected bike lanes, and multi-use paths receive the highest scores. Cycling in mixed traffic conditions with varying operating speeds and street widths score lower.







#### Road Network Where do you experience traffic congestion?

The map below illustrates where there is known traffic congestion. Place a **red dot** where you experience traffic congestion. Place a **green dot** for areas where you see opportunities to improve traffic. Comments can also be provided on **post-it notes**.





#### **Pedestrian Network**

#### Where do you see gaps or opportunities in the network?

The map below illustrates the existing pedestrian facilities. Place a **red dot** where you see a gap in the network. Place a **green dot** for areas where you see opportunities for the pedestrian network. Comments can also be provided on **post-it notes**. Where would you like to walk to and from? Put **pins** and strings on the map to indicate your preference.





#### Cycling Network Where do you see gaps or opportunities in the network?

The map below illustrates the existing cycling facilities. Place a **red dot** where you see a gap in the network. Place a **green dot** for areas where you see opportunities for the cycling network. Comments can also be provided on **post-it notes**. Where would you like to cycle to and from? Put **pins and** strings on the map to indicate your preference.



#### **Problem and Opportunity Statement**

The Town of East Gwillimbury is planned to grow significantly over the next 25 years by about 5 times its current population. This growth will result in additional and shorter trips within the Town, adding strain on the Town's internal transportation network.

At the same time, this growth represents opportunities to:

Provide new road linkages



Improve the streets within the Town, making them safe and accessible for all road users

Promote walking as the first choice for short trips



Make cycling an option for more than just recreational trips



Grow the role of transit in the Town

Ultimately, this multimodal vision for transportation will ensure that the Town is a safe, accessible, and livable community in the future

What do you think of this draft Vision Statement?

Place a green dot if you like it, and a red dot if you think it needs improvement. Comments can also be provided on post-it notes.

#### **LOR** East Gwillimbury **Transportation Master Plan**

#### **Thank you for attending Public Information Centre 1**

#### **Next Phase**



#### Keep Informed, Get Involved, and Contact Us

Please fill out a **comment form** and return it to us today or provide your comments online by March 30, 2018.

comments on the by March 50, 20

For more information, visit us at:

www.eastgwillimbury.ca/projects

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#### **Study Schedule**



# **Town of East Gwillimbury** Station 3 Water and Wastewater Master Plan Update







The Town of East Gwillimbury has retained WSP to update their Water and Wastewater Master Plan, in order to ensure accommodation of the expected population of developments to increase to the year 2041. As a result of this growth, safe, efficient, and reliable supply of water and wastewater services to the Town will become increasingly important and challenging, and the Town's water and wastewater systems will need to be expanded as necessary to accommodate this growth. The Master Plan provides a 'roadmap' of water and wastewater infrastructure requirements based on existing and future capacity deficiencies identified, as well as associated cost details and recommended implementation timing.

### • Complete a comprehensive review of background documentation, existing water and wastewater system and key relevant studies

- Calculate the future water and wastewater flows based on future expected populations provided by York Region
- Review and update the Town's current water and wastewater models based on existing infrastructure and population (Boards 9 and 10)
- Identify opportunities and constraints to improve the water and wastewater network based on existing and future populations.

# PROJECT OVERVIEW

# OBJECTIVES

- solutions for future growth scenarios
- Evaluate the alternatives, using a set of criteria (Board 7)
- recommended servicing strategies.



• Develop alternative water and wastewater servicing

determined as part of the Master Plan, to arrive at preferred water and wastewater servicing solutions

• Prepare cost details and implementation timing for



The Municipal Class Environmental Assessment (EA) under the Ontario Environmental Assessment Act was approved in 1990 as a way to streamline the planning of municipal infrastructure. The process was designed to protect the environment, receive stakeholder and resident feedback, and ensure a transparent evaluation and decision process. The Municipal Class EA Planning and Design process include a total of 5 phases. The required phases to be completed are based on the type of study that is being conducted.

At a minimum, a Master Plan must follow the first 2 phases. Phases 3 through 5 are usually completed as part of a separate process. when the time comes to implement the projects.

# MASTER PLANNING PROCESS

A Master Plan is a **long term** plan which integrates infrastructure requirements for existing and future land use. The study will provide the framework for planning and subsequent projects and/or development. At the end of the study, the key deliverables will be:

- The completed Master Plan Report documenting the process and analyses that were conducted;
- A list with high-level cost estimates of future infrastructure projects for the Town of East Gwillimbury; and
- A map indicating where these future infrastructure projects will be located.

# CLASS ENVIRONMENTAL ASSESSMENT PROCESS







### The following table and figure are illustrative examples of the final products the Town will receive when the study has been completed.

PROJECT NO.	ESTIMATED YEAR REQUIRED	PROJECT	DESCRIPTION	ESTIMATED COSTS	CLASS EA SCHEDULE	TRIGGER
<b>W-01</b>	2017 - 2022	Watermain upgrade along Street A	Capacity expansion	\$100,000	Schedule 'B'	To accommodate a population of 10,000 in Community A
<b>W-02</b>	2036 - 2041	New collector watermain along Road B	Capacity expansion	\$400,000	Schedule 'C'	To accommodate a population of 2,000 in Community B
WW-01	2017 - 2022	Avenue C Pumping Station upgrade	Capacity expansion	\$200,000	Schedule 'B'	To accommodate a population of 15,000 Community C
WW-02	2031 - 2036	New trunk sewer along Boulevard D	Capacity expansion	\$350,000	Schedule 'C'	To accommodate a population of 8,000 in Community D







# THE FINAL PRODUCT

### Avenue C Pumping Station upgrade

New trunk sewer along Boulevard D

Watermain upgrade along Street A

### New collector watermain along Road B



The following figure has been taken from the previous Town of East Gwillimbury Water and Wastewater Master Plan (2009) as an illustrative example of what one of the final maps of the proposed upgrades to the East Gwillimbury water system could look like.

The map below shows the recommended water system for the ultimate buildout scenario (as recommended in 2009) based on projected population growth in the communities.

![](_page_18_Figure_3.jpeg)

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![](_page_18_Picture_5.jpeg)

![](_page_18_Picture_6.jpeg)

### THE FINAL PRODUCT

### Legend

Existing Region / Town Water Storage (Sharon & Holland Landing east tanks to be decommissioned) Existing Region / Town Well **Existing Town Water Pump Station** Exist. / Prop. Region Water Meter Chamber **Proposed Pressure Reducing Valve Proposed Region Water Storage Existing Region Trunk Watermain** Proposed Region Trunk Watermain Proposed Town Trunk Watermain Proposed Pressure District Boundary

Natural Heritage Systems A and B

**Proposed Pressure District** 

NOTE: TOWN EXISTING AND PROPOSED LOCAL SYSTEMS ARE NOT SHOWN INFRASTRUCTURE ALIGNMENTS SHOWN ARE CONCEPTUAL.

![](_page_19_Picture_0.jpeg)

The following figure has been taken from the previous Town of East Gwillimbury Water and Wastewater Master Plan (2009) as an illustrative example of what one of the final maps of the proposed upgrades to the East Gwillimbury wastewater system could look like.

The map below shows the recommended wastewater system for the ultimate buildout scenario (as recommended in 2009) based on projected population growth in the communities.

![](_page_19_Figure_3.jpeg)

![](_page_19_Picture_5.jpeg)

![](_page_19_Picture_6.jpeg)

### THE FINAL PRODUCT

### Legend

**Existing Region Pump Station** 

Existing Town Pump Station

**Proposed Region Pump Station** 

**Proposed Town Pump Station** 

Manhole No. 2a (see design sheets, Appendix C)

#### Sewer / Forcemain / Pump Station

(Jurisdiction Region / Town to be determined)

Proposed Region Forcemain

**Existing Region Trunk Sewer** 

**Proposed Region Trunk Sewer** 

Potential Region Trunk Sewer Option

Proposed Town Forcemain

**Proposed Town Trunk Sewer** 

Wastewater Drainage Area Boundary

Service Area Boundary

Natural Heritage Systems A and B

NOTE: TOWN EXISTING AND PROPOSED LOCAL SYSTEMS ARE NOT SHOWN. INFRASTRUCTURE ALIGNMENTS SHOWN ARE CONCEPTUAL.

![](_page_20_Picture_0.jpeg)

General alternative solutions are listed below. Detailed alternative solutions will be generated on a case-by-case review of the Town's water and wastewater systems, and may include a combination of the alternatives listed below. This will take place at a later time in the Master Planning process and will be presented at the second Public Consultation Session.

![](_page_20_Figure_2.jpeg)

# IDENTIFICATION OF ALTERNATIVES

- Do nothing
- Repair or replace sewers
- network
- Expand system to accommodate growth

![](_page_20_Picture_11.jpeg)

![](_page_20_Picture_12.jpeg)

• Upgrade or construct new pumping stations Upgrade the existing wastewater conveyance 6

East Gwillimbury

![](_page_21_Picture_1.jpeg)

### Alternative Solutions Based on the Following Criteria

![](_page_21_Figure_3.jpeg)

### NATURAL ENVIRONMENT

- Proximity to environmentally sensitive and designated natural areas (e.g. Oak Ridges Moraine, Greenbelt)
- Impact on existing natural environment feature (e.g. Species at Risk)
- Impact on Areas of Natural and Scientific Interest (ANSI)
- Impact on watercourses and aquatic habitat

- Constructability, duration of construction and site access
- Ease of connection to existing infrastructure and ease of modifications required to existing infrastructure
- System reliability, redundancy and hydraulic performance
- Maintaining of enhancing security of supply

# EVALUATION OF ALTERNATIVES

### TECHNICAL

### SOCIAL & CULTURAL

- Impact to water quality, built heritage areas and areas or archaeological importance
- Aesthetic impact on existing and proposed development
- Consistency with Land Use designations, approved Development Plans, and proposed Land Use changes
- Traffic impacts during construction

### ECONOMIC

- Capital costs
- Operations and maintenance costs

![](_page_21_Picture_24.jpeg)

![](_page_21_Picture_25.jpeg)

### EVALUATION COLOUR RATING SYSTEM

### Most Preferred

Less Preferred

Least Preferred

![](_page_22_Picture_0.jpeg)

- First Nations Communit
- **Environmental Agencies**
- Neighbouring Municipa
- Developers

![](_page_22_Picture_6.jpeg)

# PUBLIC CONSULTATION

A major component of the Master Planning process is consultation with the public, agencies, and First Nations communities that may be affected by the proposed infrastructure projects. Stakeholders include:

ies	•	Federal/Provincial Author
5	•	Residents
lities	•	Employers/Employees

Although your input is valued and will be considered during all phases of the project, there are specified milestones where you can provide your feedback. Notices will be sent out two weeks in advance of the following milestones:

- PIC #1 (We are here)
- PIC #2 (Expected in Summer 2018, prior to selecting preferred alternative solution)
- 30-day Review Period after the filing of the final Master Plan document
- The Master Plan document will be available for review once filed in the Town offices and on the project website.

We encourage you to submit your feedback and join the project mailing list. Contact information for the Water and Wastewater Master Plan Update can be found on **Board 11**.

![](_page_22_Picture_16.jpeg)

![](_page_22_Picture_17.jpeg)

![](_page_22_Picture_20.jpeg)

![](_page_23_Picture_0.jpeg)

![](_page_23_Figure_1.jpeg)

# EXISTING WATER SYSTEM & LAND USE

![](_page_23_Picture_3.jpeg)

![](_page_24_Picture_0.jpeg)

![](_page_24_Figure_1.jpeg)

# EXISTING WASTEWATER SYSTEM & LAND USE

![](_page_24_Picture_3.jpeg)

![](_page_24_Picture_4.jpeg)

![](_page_25_Picture_0.jpeg)

# STAY INFORMED

Please sign-in to receive future meeting notices.

Stay informed by visiting our project webpage: <a href="http://eastgwillimbury.ca/projects">http://eastgwillimbury.ca/projects</a>

If you would like to submit your comments directly to the Study Team, please contact:

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Ray Wrzala, C. Tech. Senior Engineering Technologist Town of East Gwillimbury 19000 Leslie Street Sharon, Ontario LOG 1V0 Tel: 905-478-4283 ext. 3852 RWrzala@eastgwillimbury.ca Mani Ruprai Consultant Project Manager WSP Canada Inc. 100 Commerce Valley Drive W Thornhill, Ontario L3T 0A1 Tel: 905-882-4211 ext. 6548 Mani.Ruprai@wsp.com Thursday, March 22<sup>nd</sup>, 2018 @ East Gwillimbury Sports Complex, Canada Hall

> Identification of Alternatives

Technical, natural, social, financial and archaeological assessment. Identification of preferred solution.

> Public Information Centre #2

Documents findings of study. Incorporate comments received from the public and review agencies.

> Notice of Study Completion

![](_page_25_Picture_14.jpeg)

![](_page_25_Picture_15.jpeg)

### NEXT STEPS

![](_page_25_Figure_17.jpeg)

11